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A BIOLOGICAL EVALUATION OF INDIAN FLAT CAMPGROUND AND REDBUD PICNIC AREA, MARIPOSA RANGER DISTRICT, SIERRA NATIONAL FOREST

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ABSTRACT

Indian Flat Campground and Redbud Picnic Area on the Mariposa Ranger District were evaluated for pest problems which may affect resource management objectives for the sites. Only minor problems, including Digger pine dwarf mistletoe, some potentially hazardous trees, and true mistletoe, were noted.

INTRODUCTION

At request of the Forest Supervisor, Sierra National Forest, Forest Pest Management conducted biological evaluations of several campgrounds on the Forest in August, 1984. This report is the biological evaluation of Indian Flat Campground and Redbud Picnic Area on the Mariposa Ranger District. The objective was to identify existing and potential pest situations, to provide information on the expected future conditions of each site, and to provide the Mariposa District with pest management considerations for integration into vegetation management plans for the two sites. The evaluation was coordinated in the field with John Johnston, Fire Management Officer, from the District.

INDIAN FLAT CAMPGROUND

Observations and Discussion

This 16 unit campground is bounded by the Merced River on the north and State Highway 140 on the south. Because Indian Flat is only a few miles from Yosemite National Park, it receives heavy overflow use throughout the summer from recreationists when Park campgrounds are full. Vegetation is characterized by scattered overstory ponderosa pines, and, in the understory, by a mixture of black oak, cottonwood, willow, Digger pine, incense-cedar, redbud,

and one Douglas-fir. Poison oak is common throughout. The understory vegetation appeared to provide adequate visual barriers between units, and it, in addition to physical barriers defining camp units, apparently limited soil compaction despite heavy recreational use.

Few pest problems were noted. The only disease situation present was light to moderate infections of Digger pine dwarf mistletoe (Arceuthobium occidentale), confined to a few pines between units 6 and 10 and one pine across the road at unit 9. If these infected Digger pines were removed, or if infected branches were pruned, a source of inoculum for spread to adjacent pines would be eliminated, and the campground would probably remain free of the dwarf mistletoe for many years to come. Pruning is feasible if the dwarf mistletoe is confined to the lower two-thirds of the crown. To eradicate the dwarf mistletoe, all branches to one whorl above the highest infected branch should be pruned. Trees should be inspected 3 to 5 years after pruning and latent infections removed. No insect problems were observed.

Because the oaks and cottonwoods within the campground are of small diameter and relatively young, decay commonly associated with these species had not developed. Some potential tree hazards were noted. Dead oak branches were present over unit 5. Dead Digger pine branches were present at unit 9. A few dead branches in the lower crowns of a clump of cottonwoods were overhanging the restroom at the eastern end of the campground. Two 30" and 48" dbh ponderosa pines, outside the campground limits behind unit 12, had large basal scars and hollow butt logs. These two trees should be considered for removal because of their potential for failure and their proximity to trails to the river. Additional hazardous situations may develop in the future as the hardwoods mature. An annual hazard tree inspection program that includes preventing the development of future hazardous trees and situations, and identification and treatment of hazard, should be implemented and maintained.

Indian Flat campground illustrates well the principle that vigorous, all-aged, mixed species, and properly stocked stands are subject to few, if any, pest problems. The maintenance of this stand condition should be a part of resource management objectives for the area to prevent or reduce future pest impact.

REDBUD PICNIC AREA

Observations and Discussion

The Redbud Picnic area is located about one mile east of Indian Flat Campground, adjacent to Highway 140 and the Merced River. The five existing picnic sites are proposed for rehabilitation and additional walk-in picnic sites are to be constructed. Vegetation consists of scattered ponderosa pines in the overstory, with an understory of live oak, black oak, willow, California buckeye, redbud, wild grape, and an abundance of poison oak. Some incense-cedar are present in the eastern portion of the area.

Only two minor pest or hazard tree situations were observed. Three dead, small diameter, black oak branches were overhanging the restroom. One clump of true mistletoe (Phoradendron villosum subsp. villosum) was present in the crown of a live oak at the western end of the proposed development area.

When rehabilitation work is done, the minor problems noted above could easily be corrected by judicious pruning. When additional picnic sites are constructed, preserving the health of the vegetation should be kept in mind by avoiding damage to the roots and bases of retained trees and by directing human traffic so as to protect shallow root zones from undue trampling and soil compaction. Severe changes in grade levels should also be avoided to protect roots and to maintain normal drainage and soil moisture patterns.